

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* WILHELM A. KELLER

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Appeal No. 95-2880  
Application 08/091,294<sup>1</sup>

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HEARD: September 15, 1997

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Before MEISTER, ABRAMS and FRANKFORT, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> Application for patent filed July 15, 1993.

Appeal No. 95-2880  
Application 08/091,294

This is an appeal from the decision of the examiner refusing to allow claims 1, 2, 4 through 6 and 8 through 17 after amendment subsequent to the final rejection. Claims 3 and 7 have been canceled. No claims have been allowed.

The appellant's invention is directed to a mixer for a dispensing appliance (claims 1 and 4 through 6), an attachment for a mixer for a dispensing appliance (claims 2 and 8 through 10), a mixing apparatus (claims 11 through 14), and an attachment for placement over a dispensing means of a mixing apparatus (claims 15 through 17). The subject matter before us on appeal is illustrated by reference to claim 1, which reads as follows:

1. A mixer for a dispensing appliance having a double cartridge, comprising means for sealing and for rotatably snap-in mounting an attachment at a dispensing end of said mixer, said mounting and sealing means comprising a circular bead provided at a dispensing end of said mixer and a corresponding groove provided in a mounting end of said attachment, said bead and the external diameter of the dispensing end of said mixer, on one hand, and said groove and the internal diameter of said attachment, on the other hand, having such dimensions that said attachment is rotatably and sealingly maintained on said mixer.

#### *THE REFERENCES*

The references relied upon by the examiner to support the final rejection are:

Livingstone	2,715,480	Aug. 16, 1955
Reed	2,815,895	Dec. 10, 1957
Yoshioka	4,241,855	Dec. 30, 1980
Colin et al. (Colin)	4,995,540	Feb. 26, 1991

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Schneider et al. (Schneider) <sup>2</sup> (European application)	0,182,217	May 28, 1986
Yu (Canadian Patent)	1,238,023	Jun. 14, 1988

#### *THE REJECTIONS*

The following rejections stand under 35 U.S.C. § 103:

- (1) Claims 1, 2, 4, 8, 9, 11 and 12 on the basis of Colin, Yu, and Yoshioka or Schneider.
- (2) Claims 5, 6 and 10 on the basis of Colin, Yu, and Yoshioka or Schneider, taken further in view of Livingstone.
- (3) Claims 13 through 17 on the basis of Colin, Yu, and Yoshioka or Schneider, taken further in view of Reed.

The rejections are explained in the Examiner's Answer.

The opposing viewpoints of the appellants are set forth in the Brief and the Reply Brief.

#### *OPINION*

All three of the rejections before us are under 35 U.S.C. § 103, and we have evaluated them on the basis of the following guidelines provided by our reviewing court: The examiner bears

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<sup>2</sup>A PTO translation is enclosed.

the initial burden of presenting a *prima facie* case of obviousness (see *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) and *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)), which is established when the teachings of the prior art itself would appear to have suggested the claimed subject matter to one of ordinary skill in the art (see *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) and *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). This is not to say, however, that the claimed invention must expressly be suggested in any one or all of the references, rather, the test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art (see *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1025, 226 USPQ 881, 886-87 (Fed. Cir. 1985) and *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)), considering that a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference (see *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)), with skill being presumed on the part of the artisan, rather than

the lack thereof (see *In re Sovish*, 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985)).

The thrust of the appellant's invention is directed to a sealing, rotatable snap-in mounted attachment to the mixing tube of a mixer. As manifested in claim 1, the invention is presented as a mixer for a dispensing apparatus having a double cartridge, comprising means for mounting an attachment in the form of a circular bead provided at the dispensing end of the mixer and a corresponding groove provided in the mounting end of the attachment, the bead and the groove having such dimensions that the attachment is "rotatably and sealingly" maintained on the mixer.

The first rejection of this claim is that it is unpatentable over the combined teachings of Colin, Yu and Yoshioka. We view Colin as an example of the device over which the appellant believes his invention to be an improvement. Colin discloses a dispensing apparatus having two cartridges which provide materials to a mixer 16. At the dispensing end of the mixer is a spout 32, which is attached by a threaded connection. While it can be assumed that the spout is "sealingly" maintained on the mixer as required by claim 1, or else it would be inoperable because of leakage, it does not appear to be "rotatably"

maintained, within the definition of that term as used by the appellant. That is, rotating the spout during use is not explicitly contemplated by Colin, and to do so would cause it to screw on or off of the mixer to which it is attached. Colin clearly does not attach the spout by means of a bead and groove connection, as is required by the appellant's claim 1.

The Yu reference discloses a single cartridge caulking gun that has a detachable nozzle. Like Colin, the nozzle 84 in the embodiment shown in Figure 3 is attached to the dispensing nipple 86 by means of screw threads. As was the case with Colin, it can be inferred that the nozzle is sealingly, but not rotatably, attached to the nipple. In the alternative embodiment shown in Figure 1, however, the nozzle 12 is attached to the end of the discharge nipple 22 by means of a connection comprising a circular bead 26 provided at the dispensing end of the nipple and a corresponding groove 50 provided in the mounting end of the nozzle. Although not explicitly set forth, the nozzle would appear inherently to be rotatable on its bead and groove connection to the same extent as would be the appellant's attachment, and we note that such a conclusion is not contradicted in the text. From our perspective, the Yu connection also must be sealingly maintained on the nipple, or

else the material being dispensed would leak therethrough when pressure is applied to extrude it from the caulking gun during use, which would render the gun inoperable.

Yoshioka discloses a pouring spout mounted upon a container. It is attached by a bead (31) and groove (32) connection "in a snap-together, snap-apart and swiveling manner" (column 3, lines 12 and 13). This reference provides confirmation that it was known at the time of the appellant's invention to utilize a bead and groove connection in order to rotatably attach a device to the dispensing end of a container. We agree with the examiner that Yu would have taught one of ordinary skill in the art that screw threads and bead-and-groove arrangements are alternative means for attaching nozzles and like attachments to the discharge ends of dispensing devices. We further agree that it would have been obvious to one of ordinary skill in the art to modify the Colin dispenser by replacing the threaded attachment of the nozzle with a bead and groove system in view of the teachings of Yu and Yoshioka, suggestion being found in the self evident advantages thereof, such as ease of installation and removal, which is alluded to in the second full paragraph on page 9 of Yu and in column 3 of Yoshioka. It is our further view that one of ordinary skill in the art would have possessed sufficient

knowledge to interlock the bead and groove to the extent sufficient to seal against migration therethrough of the material being dispensed, considering such factors as the dispensing pressure and the viscosity of the material, to insure that the dispenser is operative.

For the reasons expressed above, it is our conclusion that the combined teachings of Colin, Yu and Yoshioka establish a *prima facie* case of obviousness with regard to the subject matter recited in claim 1. This rejection of claim 1 therefore is sustained.

An alternative rejection of claim 1 is based upon Colin and Yu, this time taken further in view of Schneider. Colin and Yu were discussed above. Schneider discloses a squeeze-type dispenser in which a rotatable spout is attached to the dispensing end by means of an interlocking bead and groove. According to the specification, "[t]his guarantees that the spout is mounted . . . securely, sealed, and is capable of being turned by 360°" (translation, page 7).

The analysis and conclusions expressed above with regard to the rejection utilizing Yoshioka apply as well to Schneider, and therefore we also will sustain this rejection of claim 1.



The rejections of independent claim 2 on the same grounds also are sustained, inasmuch as the appellant has grouped claims 1 and 2 together. Furthermore, since the appellant has chosen not to challenge with any reasonable specificity before this Board the rejection of dependent claim 8, it is grouped with independent claim 2, from which it depends, and falls therewith. See *In re Nielson*, 816 F.2d 1567, 1570, 2 USPQ2d 1525, 1526 (Fed. Cir. 1987).

Claim 4 depends from claim 1, and adds thereto the requirement that "the dispensing end of said mixer and the mounting end of said attachment each have a respective, sealingly engaging shoulder." The claim stands rejected as being obvious over the same alternative sets of references as were applied against claim 1. We agree with the appellant that this structure is not taught by Colin, Yu, Yoshioka or Schneider, and therefore we will not sustain either of the two rejections of claim 4.

Livingstone is added to the two alternative sets of references discussed above in the rejection of claim 5, which provides a sealing lip on one of the shoulders recited in claim 4. However, Livingstone does not alleviate the deficiencies in the other references which caused us not to sustain the

rejections of claim 4, and therefore we also will not sustain the rejections of claim 5.

Livingstone also does not cause us to sustain the rejections applied to claim 6, which adds to claim 1 "a shoulder in which a sealing means is arranged." Yoshioka is the only reference applied against this claim that discloses sealing means in addition to the bead and groove connection, and therefore the rejection which includes Schneider rather than Yoshioka fails on its face. However, the Yoshioka sealing means does not include the required shoulder, and even assuming, *arguendo*, that it would have been obvious to add Livingstone's lip sealing means to the modified Colin device, we fail to perceive any suggestion or motivation which would have caused one of ordinary skill in the art to make the further modification of providing a shoulder upon which to install this sealing lip.

Claim 9 adds a pair of sealing shoulders to the structure recited in claim 2, as claim 4 did to claim 1, and we will not sustain the rejections of this claim for the same reasons as claim 4.

Livingstone also was added to the rejections against claim 10, which depends from claim 9. However, the comments and

conclusions made above with regard to claim 5 apply here, also, and the rejections of claim 10 are not sustained.

Independent claims 11 and 15 both contain the limitation that there be a shoulder formed on the dispensing end of the dispensing means and a shoulder formed on the attachment, as well as a means on one of them for engaging the other. As we stated above, such an arrangement is not taught by the combination of Colin, Yu and Yoshioka, or Colin, Yu and Schneider. Nor does Reed, which is cited against claim 15 *et al.*, alleviate the problem. Therefore, we will not sustain these rejections of independent claims 11 and 15 or of dependent claims 12 through 14, 16 and 17.

In the course of our evaluations we have carefully considered all of the arguments presented by the appellant. However, as to those rejections which we have sustained, these arguments did not persuade us that the decision of the examiner was in error. Our positions with regard to the various arguments should be apparent from the foregoing discussions of the rejections.

In addition, we voice our disagreement with the appellant regarding his assertion in the Reply Brief that Yoshioka and Schneider are from nonanalogous arts. The test for analogous art

is first whether the art is within the field of the inventor's endeavor and, if not, whether it is reasonably pertinent to the problem with which the inventor was involved. See *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979). A reference is reasonably pertinent if, even though it may be in a different field of endeavor, it logically would have commended itself to an inventor's attention in considering his problem because of the matter with which it deals. See *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1061 (Fed. Cir. 1992). In our view, both Yoshioka and Schneider are dispensers in which material issues from a nozzle or spout, and therefore they are within the field of the appellant's endeavors. Moreover, each is directed to a dispenser in which the spout is rotatably attached, and therefore in our opinion they are pertinent to the problem the appellant is attempting to solve, which is to provide a sealing, rotatable snap-in mount (specification, page 2, lines 8 through 10).

SUMMARY:

The rejection of claims 1, 2 and 8 as being unpatentable over Colin in view of Yu and Yoshioka is sustained.

The rejection of claims 1, 2 and 8 as being unpatentable over Colin in view of Yu and Schneider is sustained.

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All of the other rejections are not sustained.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

*AFFIRMED-IN-PART*

JAMES M. MEISTER	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
NEAL E. ABRAMS	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	

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